

## REMARKS

Claims 1-13 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1. Claims 1-13 are indeed pending in the application.

2-3. Claims 8-9 and 11-12 currently stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of co-pending Application 09/976,547.

The undersigned notes the provisional status of this rejection and will resolve this issue upon an indication that the claims in this application contain allowable subject matter.

4. Claim 10 currently stands provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of co-pending Application 09/976,547.

The undersigned notes the provisional status of this rejection and will resolve this issue upon an indication that the claims in this application contain allowable subject matter.

5. Claims 1-6 currently stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of co-pending Application 09/976,547 in view of published U.S. Patent Application 2002/0172276 to Birru (hereinafter "Birru").

The undersigned notes the provisional status of this rejection and will resolve this issue upon an indication that the claims in this application contain allowable subject matter.

6-7. Claims 1-13 currently stand rejected for allegedly being obvious in view of the combined subject matter disclosed in U.S. Patent Application 2002/0172276 to Birru (hereinafter "Birru") and U.S. Patent Application 2002/0051498 to Thomas (hereinafter "Thomas").

It is recognized that Birru fails to disclose a Viterbi decoder having sixteen (16) and the decision feedback equalizer having more than 16 taps and a mapper element between the decoder and the decision feedback element. (see Official Action, pg. 6, last sentence – pg. 7, line 2). It is then alleged that Thomas discloses a Viterbi decoder and a mapper. (Official Action, pg. 7, lines 1-7). It is further alleged that using a decoder with sixteen stages and the decision feedback equalizer with more than 16 taps or fewer than sixteen taps depending on the complexity desired in implementing the desired equalizer. (Official Action, pg. 7, lines 7-19). It is respectfully submitted that a *prima facie* case of obviousness has not been presented.

Specifically, the Official Action is lacking the necessary factual, nonconclusionary statement regarding why a skilled person at the time of the invention would have combined the references as alleged. "*Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination.*" In re Geiger, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). "*Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.'*" In re Laskowski, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), citing In re

Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, “[w]hen the incentive to combine the teachings of the references is not readily apparent, it is the duty of the examiner to explain why the combination of the reference teachings is proper.” Ex parte Stone, 2 U.S.P.Q.2d 1788, 1790 (Bd.App. & Int’f 1986) (emphasis added).

As noted above, it is fundamental that obviousness can not be established absent some teaching to combine the references, or a suggestion or incentive supporting the combination of references. See In re Geiger, at 1278 (Fed. Cir. 1987). In the instant case the Official Action is lacking the necessary factual, non-conclusionary explanation why the combination of the Birru and Thomas is proper. Hence, it is respectfully submitted that a *prima facia* case of obviousness has not been presented since there is no proper teaching, suggestion or incentive that would lead one of ordinary skill in the art to modify Birru based upon the teachings of Thomas to create the claimed invention. The Official Action fails to provide any evidence or reasonable rationale regarding why the sixteen 16 stages is simply a design choice as alleged in the Official Action. The undersigned is unwilling to accept such an allegation regarding the design choice as judicial notice.

For all the foregoing reasons, reconsideration and allowance of claims 1-13 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

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